

**UNDER REVIEW**

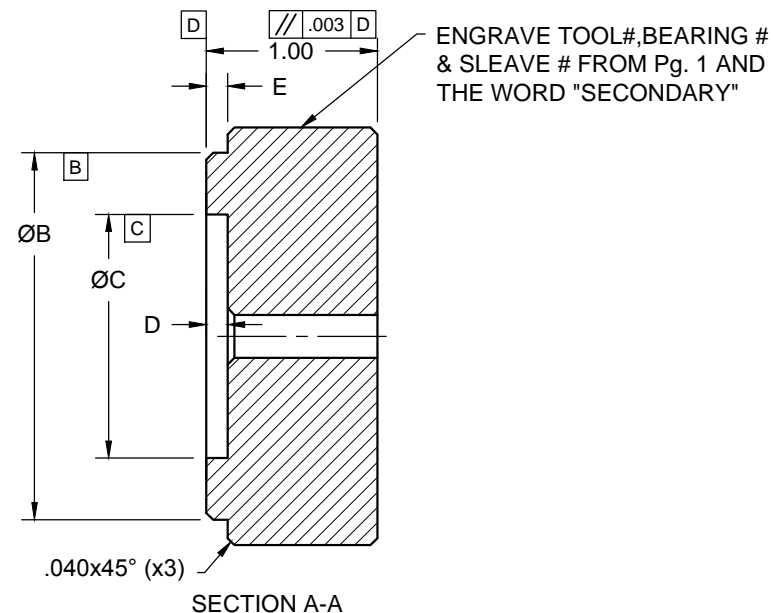
URF 19-1115 19.10.30 (VM)

#### NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).

TOOL #	ØA + .000 - .002	B + .010 - .010	PIN TYPE	QTY	MATERIAL
KSTFP05-SL	.309	.676	III	2	1018 RND. BAR Ø3/8 x 7/8
KSTFP05A-SL	.309	.580	III	2	1018 RND. BAR Ø3/8 x 7/8


<b>RED BARN MACHINE</b>	
TITLE KSTFP##-SL SERIES DP TRI-ROLLER SLEEVE SWAGING TOOLS FOR BACB10FP## BEARINGS	
DWG NO. TOOL# (see chart)-15	REV -
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± 5° X ± .1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 9-27-08
SHEET 9 of 9	

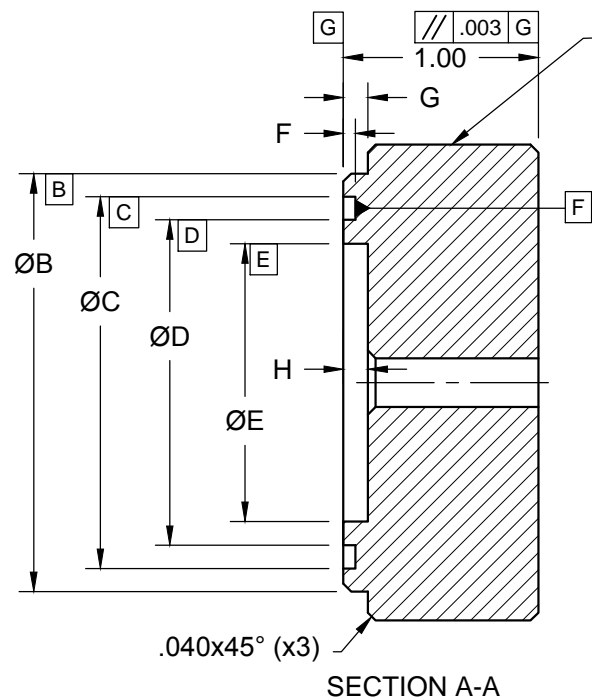


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1. BREAK ALL SHARP CORNERS (.015/.03).


 <b>RED BARN MACHINE</b>	
<b>TITLE</b> KSTFP##-SL SERIES DP TRI-ROLLER SLEAVE SWAGING TOOLS FOR BACB10FP## BEARINGS	
<b>DWG NO.</b>	<b>REV</b> -
<b>TOOL# (see chart)-13</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	<b>DRAWN BY: PERRITT</b> <b>APPROVED</b> _____ <b>HEAT TREAT</b> <b>FINISH</b> <b>BLACK OXIDE</b> <b>SPEC</b> _____ USED ON BEARING <b>SEE Pg. 1</b>
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES 015 x 45° PR. 015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
<b>SCALE</b> <b>NTS</b>	<b>DATE</b> 9-27-98 <b>SHEET</b> 8 of 9



URF 19-1115 19.10.30 (VM)

NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).

 <b>RED BARN MACHINE</b>			
<b>TITLE</b> KSTFP##-SL SERIES DP TRI-ROLLER SLEEVE SWAGING TOOLS FOR BACBIOFP## BEARINGS			
<b>DWG NO.</b> TOOL# (see chart)-11			<b>REV</b> —
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS: .XXX ± .005      FRACTIONS ± 1/32 .XX ± .01      ANGLES ± 5° .X ± .1		<b>DRAWN BY:</b> <b>PERRITT</b> <b>APPROVED</b> _____ <b>HEAT TREAT</b> _____ <b>FINISH SPEC</b> <b>BLACK OXIDE</b> _____ USED ON BEARING <b>SEE Pg. 1</b>	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LINES APPLY AFTER PLATING			
<b>SCALE</b> NTS	<b>DATE</b> 9-27-08	<b>SHEET</b> 7 of 9	


Technical drawing of a mechanical part with the following dimensions and tolerances:

- Top edge:  $.322$  (total width) and  $.302$  (width of the top flange).
- Left edge:  $R.015 \text{ MIN.}$  (minimum radius).
- Bottom edge:  $.020$  (total height) and  $.010$  (height of the bottom flange).
- Bottom left corner:  $45^\circ$  (fillet angle).
- Bottom center:  $C$  (center point).
- Bottom right:  $.08$  (width of the bottom flange).
- Right edge:  $\varnothing B$  (diameter of the hole).
- Top right corner:  $.003$  (tolerance) and  $A$  (feature control symbol).
- Overall length:  $D$  (dimension line).

URF 19-1115 19.10.30 (VM)

[illegible]

1. BREAK ALL SHARP CORNERS (.015/.03).


 <b>RED BARN MACHINE</b>	
<b>TITLE</b> KSTFP##-SL SERIES DP TRI-ROLLER SLEEVE SWAGING TOOLS FOR BACB10FP## BEARINGS	
<b>DWG NO.</b>	<b>REV</b> —
<b>TOOL#</b> (see chart)-9	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS: .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	<b>DRAWN BY:</b> <b>PERRITT</b> <b>APPROVED</b>  <b>HEAT TREAT</b>  <b>FINISH SPEC</b> <b>BLACK OXIDE</b>  USED ON BEARING  <b>SEE Pg. 1</b>
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LINES APPLY AFTER PLATING	
<b>SCALE</b> <b>NTS</b>	<b>DATE</b> 9-27-08
	<b>SHEET</b> 6 of 9

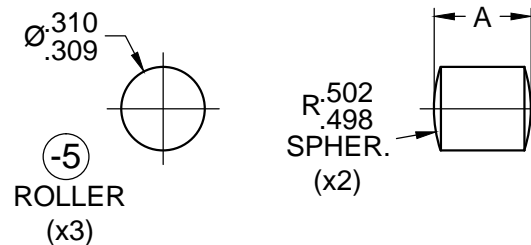


NOTES

1. BREAK ALL SHARP CORNERS (.015/.03).

URF 19-1115 19.10.30 (VM)


 <b>RED BARN MACHINE</b>			
<b>TITLE</b> KSTFP##-SL SERIES DP TRI-ROLLER SLEAVE SWAGING TOOLS FOR BACB10FP## BEARINGS			
<b>DWG NO.</b> TOOL# (see chart)-7			<b>REV</b> -
<b>UNLESS OTHERWISE SPECIFIED  DIMENSIONS ARE IN INCHES</b>  <b>TOLERANCES ON:</b> DECIMALS XXX ± .005      FRACTIONS 1/32 XX ± .01      ANGLES ± 5° X ± .1		<b>DRAWN BY:</b> <b>PERRITT</b>  <b>APPROVED</b>  HEAT TREAT FINISH SPEC	
<b>UNLESS OTHERWISE SPECIFIED  1. BREAK ALL SHARP EDGES  015 x 45° PR. 015 R  2. DIMENSIONAL LIMITS APPLY AFTER PLATING</b>		<b>USED ON BEARING</b>  <b>SEE Pg. 1</b>	
<b>SCALE</b> NTS		<b>DATE</b> 9-27-08	<b>SHEET</b> 5 of 9



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TOOL #	A	MATERIAL		
KST-BACB10FP	+.001 -.001			
KSTFP05-SL	.360	.310 MINUS	GAUGE PIN	MSC#89031009
KSTFP05A-SL	.285	.310 MINUS	GAUGE PIN	MSC#89031009

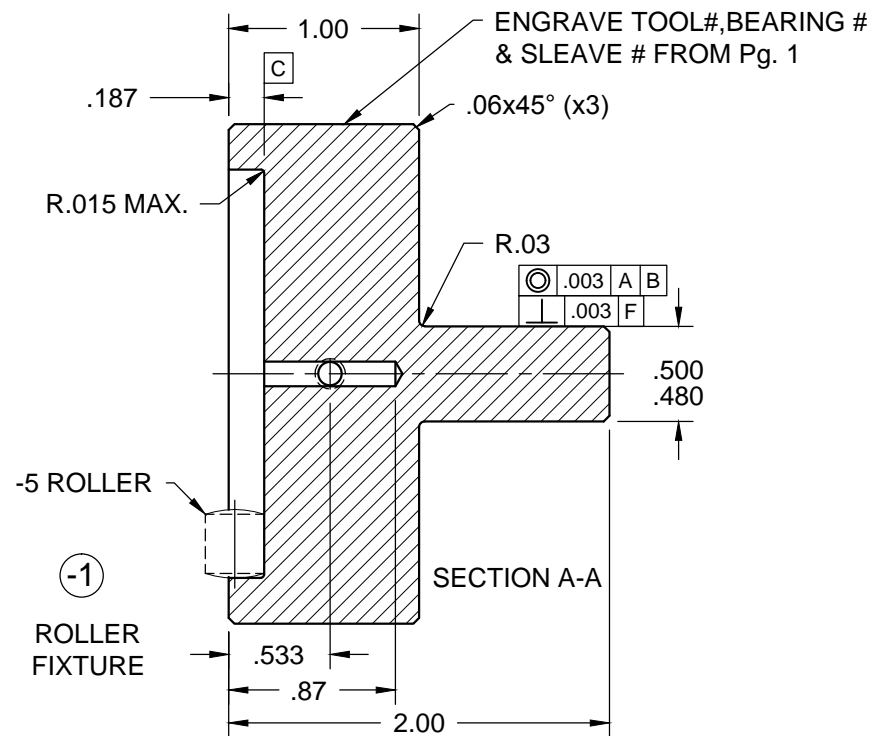
 <b>RED BARN MACHINE</b>			
<b>TITLE</b> KSTFP##-SL SERIES DP TRI-ROLLER SLEEVE SWAGING TOOLS FOR BACB10FP## BEARINGS			
<b>DWG NO.</b> TOOL# (see chart)-5			<b>REV</b> -
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 X ± .1		<b>DRAWN BY:</b> PERRITT <b>APPROVED</b> HEAT TREAT FINISH SPEC USED ON BEARING	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		<b>SEE Pg. 1</b>	
<b>SCALE</b> NTS	<b>DATE</b> 9-27-08	<b>SHEET</b> 4 of 9	



## NOTES


- [illegible]

 <b>RED BARN MACHINE</b>			
<b>TITLE</b> KSTFP##-SL SERIES DP TRI-ROLLER SLEAVE SWAGING TOOLS FOR BACB10FP## BEARINGS			
<b>DWG NO.</b> TOOL# (see chart)-3			<b>REV</b> -
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°		<b>DRAWN BY:</b> <b>PERRITT</b> APPROVED HEAT TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		USED ON BEARING SEE Pg. 1	
<b>SCALE</b> NTS	<b>DATE</b> 9-27-08	<b>SHEET</b> 3	of 9

[illegible]

1. BREAK ALL SHARP CORNERS (.015/ .03).
2. -1 BEARING RACE SURFACES MUST HAVE SMOOTH APPEARANCE, FREE FROM MACHINING MARKS AND GROOVES.
3. DO FIRST ARTICLE INSPECTION BEFORE HEAT TREATING.

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 <b>RED BARN MACHINE</b>			
<b>TITLE</b> KSTFP##-SL SERIES DP TRI-ROLLER SLEAVE SWAGING TOOLS FOR BACB10FP## BEARINGS			
<b>DWG NO.</b> TOOL# (see chart)-1			<b>REV</b> -
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES <b>TOLERANCES ON:</b> DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± .5°		<b>DRAWN BY:</b> PERRITT <b>APPROVED</b> HEAT TREAT      RC 55-60 FINISH      BLACK OXIDE SPEC USED ON BEARING SEE Pg. 1	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES 015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING			
<b>SCALE</b> NTS	<b>DATE</b> 9-27-08	<b>SHEET</b> 2 of 9	

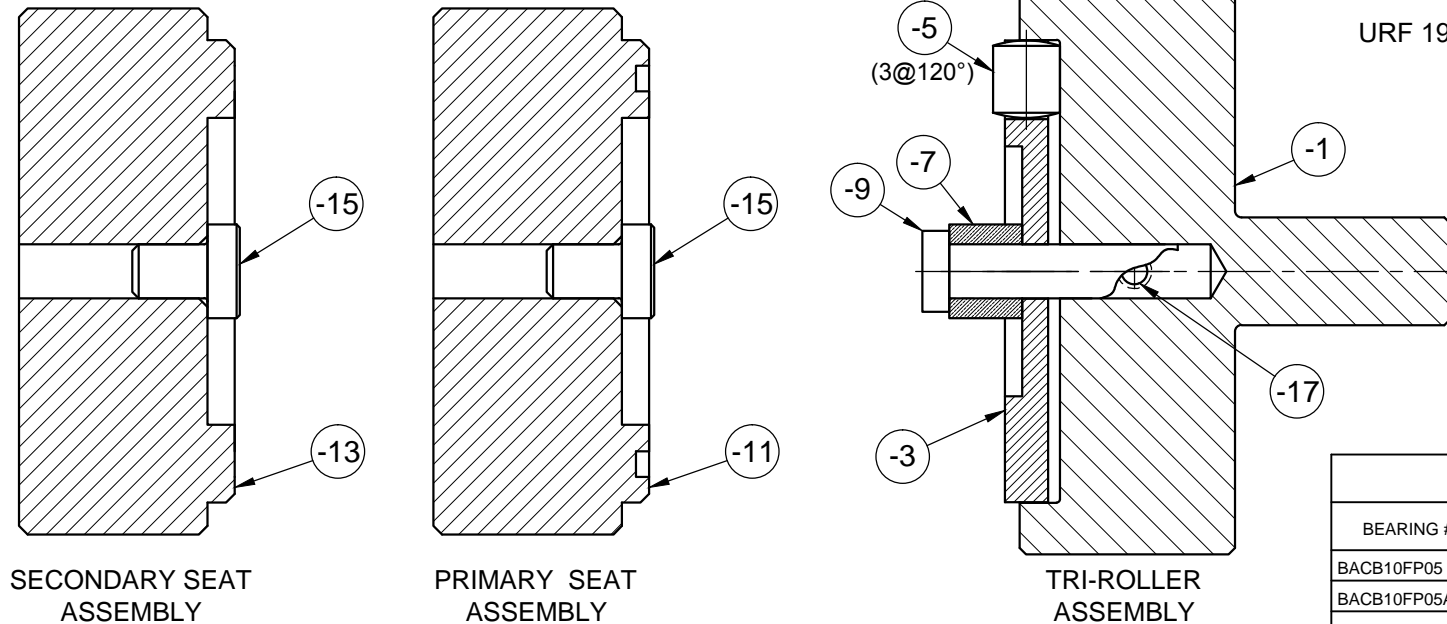


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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
-	-	-	-	-

**UNDER REVIEW**

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## DRILL PRESS TRI-ROLLER SLEEVE SWAGING TOOL ASSEMBLY FOR BEARINGS

### NOTES

1. -5 ROLLERS MUST TURN FREELY IN -3 RETAINER POCKETS.
2. -5 ROLLERS & -3 RETAINER MUST TURN FREELY WHEN TOOL IS COMPLETELY ASSEMBLED.
3. TOOL No. ENDING WITH THE LETTERS -SL ARE USED FOR SLEEVE SWAGING ONLY.

BEARINGS & TOOLS COVERED		
BEARING #	SLEEVE #	TOOL #
BACB10FP05	6938919-1	KSTFP05-SL
BACB10FP05A	6938919-31	KSTFP05A-SL

ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	B/O INFORMATION OR SPECIFICATIONS	Pg.
		-1	1	ROLLER FIXTURE	SEE CHART	2
		-3	1	RETAINER	SEE CHART	3
		-5	3	ROLLER	SEE CHART	4
		-7	1	GUIDE	SEE CHART	5
		-9	1	PIN	SEE CHART	6
		-11	1	PRIMARY SEAT	SEE CHART	7
		-13	1	SECONDARY SEAT	SEE CHART	8
		-15	SEE CHART	LOCATING PIN	SEE CHART	9
	B/O	-17	1	SOCKET HEAD SET SCREW	#8-32 x 1/4	N/S

<b>RED BARN MACHINE</b>	
TITLE KSTFP##-SL SERIES DP TRI-ROLLER SLEEVE SWAGING TOOLS FOR BACB10FP## BEARINGS	
DWG NO. SEE CHART ABOVE FOR TOOL No.	REV -
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1	DRAWN BY: PERRITT APPROVED HEAT TREAT LISTED PER ITEM FINISH LISTED PER ITEM USED ON BEARING SEE ABOVE
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 9-27-08
SHEET 1 of 9	




NOT APPROVED FOR PRODUCTION

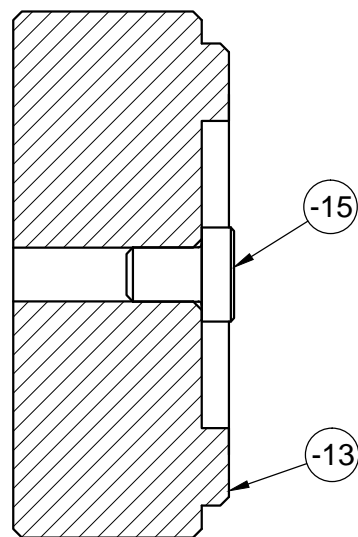
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

UNDER REVIEW

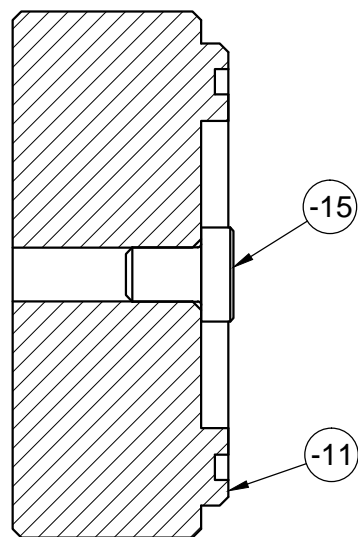
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	PART #	QTY	DESCRIPTION
	-1	1	--

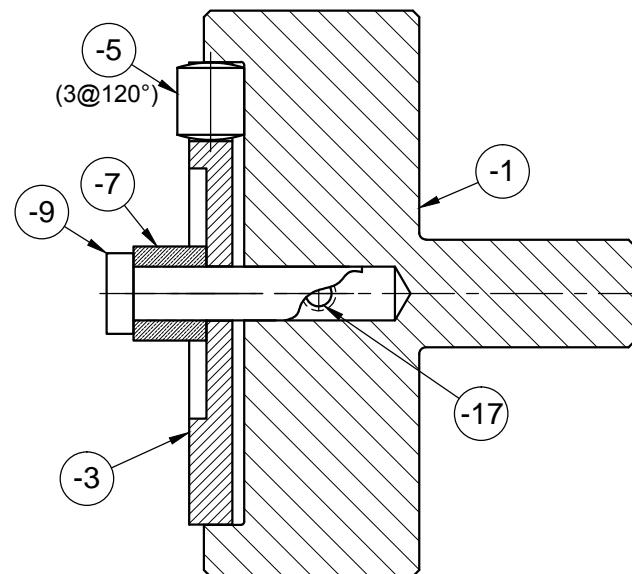
DRAWN BY: PERRITT	 RED BARN MACHINE		
CHECKED			
HEAT TREAT FINISH SPEC			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± .5°			
USED ON MODEL ?	TITLE	TITLE	
	DWG NO.	PART #	REV.
	SCALE NTS	DATE 1-28-06	SHEET 1 of 1
	UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		



SECONDARY SEAT  
ASSEMBLY



PRIMARY SEAT  
ASSEMBLY



TRI-ROLLER  
ASSEMBLY

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PART #	UNIT QTY	DESCRIPTION	KING INDUSTRIES		
-1	1	ROLLER FIXTURE	TITLE DRILL PRESS TRI-ROLLER SLEEVE TOOL ASSEMBLY FOR BACB10FP05 BEARING		
-3	1	RETAINER			
-5	3	ROLLER	DWG NO. KSTFP05-SL		
-7	1	GUIDE			
-9	1	PIN	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XXX ± .005 FRACTIONS ± 1/32 ANGLES ± 5°		
-11	1	PRIMARY SEAT			
-13	1	SECONDARY SEAT	DRAWN BY: PERRITT USED ON BEARING BACB10FP05		
-15	2	LOCATING PIN			
-17	1	SOCKET HEAD SET SCREW	SCALE NTS	DATE 9-27-08	SHEET 1 of 1